

REMARKS

Prior to this Reply, Claims 1-35 were pending. Through this Reply, no claims have been amended, added, or cancelled. Accordingly, Claims 1-35 are now at issue in the present case.

I. Allowable Subject Matter

Applicants note, with thanks, the Examiner's indication of the allowability of Claim 30. Applicants have not amended Claim 30. Accordingly, Applicants still believe that Claim 30 is allowable.

II. Rejection of Claims 1, 2, 6, 9-12, and 15-17 Under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1, 2, 6, 9-12, and 15-17 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,016,124 to Fukushima et al. (hereinafter "Fukushima") in view of U.S. Patent No. 5,412,809 to Tam et al. (hereinafter "Tam"). Applicants respectfully traverse the rejection because it is believed that the cited references, alone or in combination, fail to render Claims 1, 2, 6, 9-12, and 15-17 obvious.

A. Claims 1 and 12

At the bottom of page 2 of the Office Action, the Examiner admits that "Fukushima does not disclose a user selected maximum current draw." However, on page 3 of the Office Action, the Examiner asserts:

Tam discloses a disk drive power control circuit and method which discloses depending on the user's need, a computer user can select either the automatic spindle motor current control disclosed in Tam or a fixed large drive [current] for starting the disk drive. Refer to column 4 lines 52-68 and column 5 lines 1-3.

Applicants respectfully disagree with the rejection for at least the following reasons.

1. Tam fails to disclose selecting a maximum current draw or start-up current without the need to make a second selection

Tam notes that both the spindle motor and the actuator assembly are major dissipaters of power in a disk drive (see, e.g., Col. 2, lines 39-45; see also, Col. 7, lines 52-61). However, Tam fails to recognize that a single selection by a user can limit total current draw of a disk drive. Instead, Tam discloses that the user is to make two selections:

(1) a selection of access time for use in determining a drive current for the actuator assembly (Col. 5, lines 18-29 and Col. 5, line 65 to Col. 6, line 2), and

(2) a selection between Tam's automatic spindle current control and fixed spindle motor current (Col. 4, line 63 to Col. 5, line 3 and Col. 6, lines 18-24).

Tam specifically describes that, for control of the actuator assembly, the user would, e.g., specify a predetermined access time, from a plurality of possible access times (Col. 12, lines 8-13). This selection may then be used as the basis for providing a drive current to the actuator assembly (Col. 12, line 68 to Col. 13, line 4). It is believed there is no disclosure in Tam of using the access time selection for limiting spindle motor current.

Similarly, Tam discloses that the user can select to either disable, or to use, an automatic spindle motor current limiter (Col. 18, lines 32-44), but it is believed that there is no disclosure in Tam of using a spindle motor selection for limiting actuator assembly current.

Thus, the disclosure of Tam is that, to control disk drive current, two user selections are made: one for the actuator assembly and another for the spindle motor. Since (as acknowledged by Tam) both the actuator and the spindle motor are major power consumers, only by making both selections (as disclosed by Tam) is Tam's invention disclosed as capable of limiting current of the disk drive.

In contrast, Claim 1 requires “receiving a maximum current draw first selection, selected by said user, *without the need for the user to make a second selection* in order to select said maximum current draw” (emphasis added). Claim 12 includes similar language.

Since Tam discloses a system that involves a user making two selections (one for the actuator assembly and another for the spindle motor), Tam fails to disclose what is claimed in Claims 1 and 12 and fails to make up the admitted deficiency in Fukushima. Accordingly, for at least the above reasons, Applicants submit that Claims 1 and 12 are patentably distinguishable from Fukushima and Tam, both alone and in combination.

2. Tam fails to disclose that the user can select a maximum current draw

As noted above, Tam allows a user to select an access time for use in controlling the actuator assembly, and allows a user to disable an automatic spindle motor current control. Neither of these systems in Tam amounts to a user selection of maximum current draw.

In the case of the specification of access time, (assuming, *arguendo*, access time has a one-to-one correspondence with actuator assembly current), the system of Tam does not necessarily allow the selection of the user to be implemented. Instead, the firmware will check to see whether the user’s selection is “appropriate” and, if not, will disregard it (Col. 12, lines 48-53). Thus, the actual current draw of the disk drive may not correspond to the user’s selection (if the firmware deems it “inappropriate”).

In the case of the spindle motor, unless the user disables automatic control (in which case, the current will be fixed and “large”), the disk drive will determine what current is to be used “automatically” based on a system for selecting an “optimum level” (Col. 14, lines 66-68) and, thus, is not a selection of current by the user.

Accordingly, for at least the above reasons, Applicants submit that Claims 1 and 12 are patentably distinguishable from Fukushima and Tam, both alone and in combination.

B. Claims 2, 6, 9-11 and 15-17

Claims 2, 6, 9-11 and 15-17 are patentable, at least, because they depend, directly or indirectly, from either Claim 1 or Claim 12.

III. Rejection of Claims 18-29 and 31-35 Under 35 U.S.C. 103(a)

The Examiner rejected Claims 18-29 and 31-35 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,397,971 to McAllister (hereinafter “McAllister”) in view of Fukushima and Tam. Applicants respectfully traverse the rejection because it is believed that the cited references, alone or in combination, fail to render Claims 18-29 and 31-35 obvious.

A. Claims 18 and 23

Claims 18 and 23 include limitations similar to those discussed above in connection with Claims 1 and 12. Accordingly, Applicants believe that Claims 18 and 23 are patentable, at least, for reasons similar to those discussed above in connection with Claims 1 and 12.

B. Claims 19-22, 24-29, and 31-35

Claims 19-22, 24-29 and 31-35 are patentable, at least, because they depend, directly or indirectly, from either Claim 18 or Claim 23.

IV. Rejection of Claims 3-5, 13, and 14 Under 35 U.S.C. § 103(a)

The Examiner rejected Claims 3-5, 13, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Fukushima and Tam (as applied to Claims 1, 2, 6, 9-12, and 15-17), and further in view of U.S. Patent No. 5,381,279 to Dunn.

Applicants believe that Claims 3-5, 13, and 14 are patentable, at least, because they depend, directly or indirectly, from either Claim 1 or Claim 12.

V. Claims 7 and 8

Although Claims 7 and 8 were included among the claims indicated as “rejected” in the “Office Action Summary,” such claims appear to be **unaddressed** in the “Detailed Action.” It is believed that the Examiner also failed to state any specific grounds for rejection of, or cite any references against, Claims 7 and 8 in previous Office Actions, despite the fact that this has been pointed out to the Examiner.

Thus, the Examiner has not provided a *prima facie* case for the rejecting Claims 7 and 8. Since the Examiner has not stated the statutory basis for the rejection of Claims 7 and 8 and has not cited any references against Claims 7 and 8, Applicants can not provide any response to the rejection of Claims 7 and 8. Accordingly, it is believed Claims 7 and 8 should be considered to include allowable subject matter.

VI. Additional Claim Fees

In determining whether additional claim fees are due, reference is made to the Fee Calculation Table (below).

Fee Calculation Table

	Claims Remaining After Amendment		Highest Number Previously Paid For	Present Extra	Rate	Additional Fee
Total (37 CFR 1.16(c))	35	Minus	35	= 0	x \$50 =	\$ 0.00
Independent (37 CFR 1.16(b))	5	Minus	5	= 0	x \$200 =	\$ 0.00

As set forth in the Fee Calculation Table (above), Applicants previously paid claim fees for thirty-five (35) total claims and for five (5) independent claims. Accordingly, Applicants believe that no other fees are due. Nevertheless, the Commissioner is hereby authorized to charge Deposit Account No. 50-2198 for any fee deficiencies associated with filing this paper.


VII. Conclusion

It is believed the above comments establish patentability. Applicants do not necessarily accede to the assertions and statements in the Office Action, whether or not expressly addressed.

Applicants believe that the application appears to be in form for allowance. Accordingly, reconsideration and allowance thereof is respectfully requested.

The Examiner is invited to contact the undersigned at the below-listed telephone number regarding any matters relating to the present application.

Respectfully submitted,



Tejpal S. Hansra
Registration No. 38,172
Hansra Patent Services
4525 Glen Meadows Place
Bellingham, WA 98226
(360) 527-1400

Date: FEB. 15, 2005